



**Public Works
Storm Water Utility**

- (1) **Program Title:** **Restoring Earthen Channels**
- (2) **Division/Section:** **River Maintenance**
- (3) **Program Element:**
- (a) **TPDES**
 - 1. Storm Water Controls & Collection System Operations
 - (b) **Mandate**
- (4) **Statement of Purpose:**
This activity is associated with a TPDES permit requirement. The Permit's Storm Water Management Program Requirement (1) states that the municipal separate storm sewer system and any storm water structural controls shall be operated in a manner to reduce the discharge of pollutants to the maximum extent practicable. Total suspended solids (TSS) are one of the major contributors to poor water quality. Silt enters earthen channels as a result of erosive velocities resulting from storm events and poorly vegetated areas. The City's Storm Water Management Program specifies that the drainage channels receive regularly scheduled de-silting and erosion repair maintenance.
In addition, this activity aids in the conveyance of storm water. Silt build-up as a result of erosion changes the design characteristics of the channels and reduces the conveyance capacity of the channel.
- (5) **Description of Actions (Statement of Services):**
Channel restoration entails a reshaping of the channel to bring it back to the original shape and conveyance capacity based on design criteria. This activity normally consist of removal of vegetation during the course of reshaping the channel. Vegetation must then be re-established before the project is considered completed. All improved earthen drainage channels are inspected at a minimum every two years. Maintenance is scheduled based on a degradation priority system (1-4). Currently priority 1 projects receive necessary maintenance within a 3 month period. Priority two projects are maintained within 6 months. Scheduling is predicated by required equipment availability.